KANO LABORATORIES, INC.
SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: KROIL
Product Use: Penetrant/Lubricant for Industrial Use

Manufacturer: Kano Laboratories, Inc.
1000 E. Thompson Lane
Nashville, TN 37211
Emergency Phone Number: Chemtrec 1 (800) 424-9300
Manufacturer Phone Number: (615) 833-4101
Website: www.kanolabs.com

SDS Date of Preparation: June 6, 2018

SECTION 2: HAZARD IDENTIFICATION

GHS / HAZCOM 2012 Classification:

Health	Physical
Skin Irritation Category 2 Eye Irritation Category 2A Specific Target Organ Toxicity – Single Exposure Category 3 (Respiratory Irritation, CNS) Aspiration Hazard Category 1	Flammable Liquid 3

Label Elements

Danger!

Flammable Liquid and vapor.
Causes skin irritation.
Causes serious eye irritation.
May be fatal if swallowed and enters airways.
May cause respiratory irritation.
May cause drowsiness or dizziness.

Keep away from heat, sparks, open flames, and hot surfaces. No smoking. Keep container tightly closed.
Ground and bond container and receiving equipment
Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools.
Take precautionary measures against static discharge. Avoid breathing mist, vapors or spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, eye protection and face protection. IF SWALLOWED: Immediately call a POISON CENTER.
Do NOT induce vomiting.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical attention.
Take off contaminated clothing and wash it before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Hand protection: Impervious gloves are recommended when needed to avoid skin contact.

Eye Protection: Chemical safety goggles recommended.

Skin Protection: Impervious clothing as required to prevent skin contact and contamination of personal clothing.

Hygiene measures: Suitable eye wash and washing facilities should be available in the work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Slightly reddish liquid	**Odor:**	Solvent
Odor Threshold:	Not available	**pH:**	Not available
Melting/Freezing Point:	Not available	**Boiling Point/Range:**	Not available
Flash Point:	132°F (55.5°C) TOC	**Evaporation Rate:**	Not available
Flammability: (Solid, Gas)	Not applicable	**Flammability Limits:**	UEL: 10.9% (isobutanol) LEL: 0.7% (light petroleum distillates)
Vapor Pressure:	Not available	**Vapor Density:**	Not available
Relative Density:	0.8596	**Solubilities:**	Negligible in Water
Partition Coefficient: (N-Octanol/Water)	Not available	**Autoignition Temperature:**	Not available
Decomposition Temperature:	Not available	**Viscosity:**	Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: None known.
Chemical Stability: Stable under normal conditions of storage or use.
Possibility of Hazardous Reactions: None known.
Conditions to avoid: Avoid heat, sparks, flames and all other sources of ignition.
Incompatible Materials: Avoid strong oxidizing agents, reducing agents, acids and bases.
Hazardous decomposition products: Combustion will produce oxides of carbon, acetone, acrid fumes and smoke.

SECTION 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eye: May cause eye irritation with redness, tearing and stinging.

Skin: May cause irritation with redness, rash, swelling. Prolonged or repeated contact may result in defatting and dermatitis.

Inhalation: Inhalation of vapors or mists may cause mucous membrane and upper respiratory tract irritation and central nervous system depression. Symptoms may include coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea, fatigue and unconsciousness.

Ingestion: Swallowing may cause gastrointestinal irritation with abdominal pain, nausea, vomiting and diarrhea and central nervous system depression with symptoms including headache, dizziness, intoxication, weakness, nausea, and vomiting. Aspiration into the lungs during ingestion or vomiting may cause lung damage.

Chronic Hazards: Prolonged or repeated exposure may cause damage to the central nervous system, kidney and liver.

Carcinogen Status: None of the components of this product at greater than 0.1% are listed as carcinogens by

SECTION 15: OTHER INFORMATION

HMIS Ratings:	Health - 2	Flammability - 2	Reactivity - 0
NFPA Ratings:	Health - 1	Flammability - 2	Reactivity - 0

SDS Revision History: Sections 3, 8, 15
Date of preparation: June 6, 2018
Date of last revision: February 1, 2017

The information contained herein has been developed based upon current available scientific data. New information may be developed from time to time which may render the conclusions of this report obsolete. Therefore, no warranty is extended as to the applicability of this information to the user's intended purpose or the consequences of its use or misuse.

OSHA, IARC or NTP.

Acute toxicity: Toxicological testing has not been performed on this product as a mixture.
Acute Toxicity Estimate: Oral 35 714 mg/kg, Inhalation >5 mg/kg, Dermal >2000 mg/kg
Severely Hydrotreated Petroleum Distillates: Oral rat LD50 > 5000 mg/kg; Dermal rat LD50 > 5000 mg/kg Inhalation rat LC50 > 2.18 mg/L/4 hr.
Petroleum Distillates: Oral rat LD50 >5000 mg/kg, Inhalation rat LC50 >5.28 mg/L/4 hr, Dermal rabbit LD50 >2000 mg/kg
Diisobutyl Ketone: Oral rat LD50 5233 mg/kg; Dermal rat LD50 > 2000 mg/kg; Inhalation rat LC50 14.5 mg/L/4 hr.
Proprietary Ingredients: Oral rat LD50 2760 mg/kg; Dermal rabbit LD50 >2000 mg/kg
Dipropylene Glycol Monopropyl Ether: Oral rat LD50 >2000 mg/kg Dermal rabbit LD50 >2000 mg/kg. Dipropylene Glycol Methyl Ether: Oral rat LD50 >5000 mg/kg, Dermal rat LD50 >2000 mg/kg, Inhalation rat LD50 >5.7 mg/L/4 hr
Aliphatic Alcohol #1: Oral rat LD50 3002 mg/kg; Dermal rat LD50 > 1875 mg/kg; Inhalation rat LC50> 7.6 mg/L/4 hr.
Aliphatic Alcohol #2: Oral rat LD50 > 2830 mg/kg; Inhalation rat LC50 24.6 mg/L/4 hr.; Dermal rabbit LD50 > 2000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: No toxicity data available for the product.
Severely Hydrotreated Petroleum Distillates: 96 hr. LC50 Pimephales promelas > 100 mg/L; 48 hr. EC50 daphnia magna>1000 mg/L; 72 hr. EC50 Pseudokirchnerella subcapitata > 100 mg/L
Petroleum Distillates: 96 hr LL50 Oncorhynchus mykiss 2.5 mg/kg, 48 hr EL50 daphnia magna 1.4 mg/L, 72 hr EL50 Pseudokirchnerella subcapitata 1.3 mg/L
Diisobutyl Ketone: 96 hr. LC50 Oncorhynchus mykiss 30 mg/L; 48 hr. EC50 daphnia magna 37.2 mg/L, 72 hr. EC50 Pseudokirchnerella subcapitata 46.9 mg/L
Proprietary Ingredients: 96 hr. LC50 Oncorhynchus mykiss 18350 ug/L
Dipropylene Glycol Monopropyl Ether: 96 hr LC50 Oncorhynchus mykiss >100 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 96 hr EC50 Pseudokirchneriella subcapitata >1000 mg/L
Dipropylene Glycol Methyl Ether: 96 hr LC50 Oncorhynchus mykiss 110.2 mg/L, 48 hr LC50 daphnia magna 2701 mg/L, 72 hr EC50 Pseudokirchneriella subcapitata >1000 mg/L
Aliphatic Alcohol #1: 96 hr. LC50 Oryzias latipes >100 mg/L; 48 hr. EC50 daphnia magna >1000 mg/L; 72 hr. EC50 Pseudokirchnerella subcapitata>1000 mg/L
Aliphatic Alcohol #2: 96 hr LC50 Pimephales promelas 1430 mg/L; 48 hr EC50 daphnia pulex 1100 mg/L; 72 hr EC50 Pseudokirchnerella subcapitata 1799 mg/L

Persistence and Degradability: Aliphatic alcohol #1 and aliphatic alcohol #2 are readily biodegradable. Petroleum distillates is not readily biodegradable. Severely hydrotreated petroleum distillates is inherently biodegradable based on structurally similar chemicals.

Bioaccumulative Potential: Aliphatic alcohol #1 has a calculated BCF of 0.5. Diisobutyl Ketone has a calculated BCF of 7. Aliphatic Alcohol #2 has a calculated BCF of 3

Mobility in Soil: Aliphatic alcohol #1, aliphatic alcohol #2 and diisobutyl ketone have a high to very high mobility in soil.

Other Adverse Effects: None known

SECTION 13: DISPOSAL INFORMATION

Disposal instructions: Dispose of product in accordance with all local, state/provincial and federal regulations.

Contaminated packaging: Offer rinsed packaging material to local recycling facilities.